

In the Claims:

1. A method for performing resource pool size maintenance for an application server, comprising:
  - triggering a resource pool shrink check;
  - determining that pool shrinking is necessary;
  - reducing resources in an unavailable deque; and
  - reducing resources in an available deque.
2. The method of claim 1 wherein said triggering a resource pool shrink check includes:
  - determining that a period of time has expired; and
  - performing the resource pool shrink check at the expiration of the period of time.
3. The method of claim 2 wherein the period of time is set by a programmable attribute.
4. The method of claim 1 wherein said determining that pool shrinking is necessary includes:
  - detecting resources contained in an available deque or a unavailable deque.
5. The method of claim 1 wherein determining that pool shrinking is necessary includes:
  - determining the number of resources in the resource pool is greater than a maximum resource pool threshold value.

6. The method of claim 5 wherein the maximum resource pool threshold value is set by a programmable attribute.
7. The method of claim 1 wherein reducing resources in an unavailable deque includes:  
reducing resources in an unavailable deque to coincide with a maximum unavailable resources threshold.
8. The method of claim 7 wherein the reduced resources in the unavailable deque are destroyed.
9. The method of claim 1 wherein reducing resources in an available deque includes:  
reducing resources in an available deque to coincide with a maximum available resources threshold.
10. The method of claim 9 wherein resources in the available deque are destroyed.
11. A method for performing resource pool maintenance for an application server, comprising:  
triggering a test for pool resources;  
performing a test on pool resources; and  
refreshing pool resources based on the pool resources testing.
12. The method of claim 11 wherein said triggering a test for pool resources includes:

determining that a period of time has expired; and  
performing the resource pool shrink check at the expiration of the period of time.

13. The method of claim 11 wherein said performing a test on pool resources includes:  
determining if pool resources are functioning properly, wherein the resources are  
refreshed if they are not functioning properly.

14. A method for performing maintenance on connection pool dequeues in an application  
server, comprising:

traversing an unavailable deque and a reserved deque;  
performing maintenance on the unavailable deque; and  
performing maintenance on the reserved deque.

15. The method as claimed in claim 14 wherein said traversing an unavailable and a reserved  
dequeues includes:

determining what resources are available in the unavailable deque and the reserved  
dequeues.

16. The method as claimed in claim 14 wherein said performing maintenance on the  
unavailable deque includes:

scheduling resource creation for each resource in the unavailable deque.

17. The method as claimed in claim 14 wherein said performing maintenance on the reserved deque includes:

scheduling resource creation for each resource in the reserved deque.

18. A method for performing resource creation in a connection pool in an application server, comprising:

generating a resource in connection pool;

confirming the generation of the resource in the connection pool;

moving the resource to an available deque;

19. The method of claim 18 further comprising:

determining that a period of time has expired; and

generating a resource at the expiration of the period of time.